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## **Aerospace NESHAP Q&As**

(10/1/98, last updated 10/9/01)

**This document combines Q&As identified in the Aerospace NESHAP Implementation Document and those submitted during the August Aerospace Workshops.**

Although EPA has tried to include most of the questions that came up during the August Aerospace Workshops, there may be some questions that are not identified here. If you have questions which have not been addressed or have additional questions, please contact your State or local regulatory agency for assistance.

**There are 117 questions in this document. If you do not see your question within one subcategory, check the other subcategories. Some questions dealt with more than one topic.**

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### **Time lines**

1. Q: Are any of the compliance deadlines for items addressed in the supplemental rule amendments expected to be different from the current deadlines?  
A: Compliance with all requirements will be required by September 1, 1998
2. Q: What is the required submittal date for the initial notification of compliance status for facilities that are not subject to any initial compliance testing requirements (i.e., those without add-on control systems)? and what information should it contain?  
A: The notification of compliance status report is required by section 63.9(h) (part 63, subpart A) and section 63.753(a)(1). Existing sources must submit their notification of compliance status (NOCS) by May 1, 1999 or 60 days after the performance test (if one is performed), whichever is earlier. New sources are given 240 days after initial startup or 60 days after the performance test in which to submit the NOCS. Subsequent reports, such as semiannual compliance report required by section 63.753(c)(1) or annual compliance report required by section 63.753(d)(2), are then due from the submittal date of the notification of compliance status report. Information to include in the NOCS can be found in 63.9(h) of the General Provisions and 63.753(a)(1). Your notification should contain at least 6 months of compliance information.

### **Major Source Determinations**

3. Q: A facility made an initial statement of applicability. Now that facility is no longer a major source for HAPs. Does the facility have to comply with the NESHAP?  
A: If the facility became an area source by the compliance date, the facility would not have to comply with the NESHAP but should make notification of the change of status to the State and local permitting authority. If the facility became an area source after the compliance date, that facility is considered "Once-in-always-in" and would be subject to the NESHAP. The "Once-in-always-in" policy however, would not require you to comply with future NESHAPs that are applicable to major source. You can get more information on EPA's once-in-always-in policy by going to <http://www.epa.gov/ttn/oarpg/t3pgm.html>.
4. Q: How are airports treated under the MACT rules for purposes of determining major source status?  
A: The answer depends on how the airport is treated by the permitting authority. Please contact your state or local permitting authority for a determination on how airports are treated in your area.
5. Q: When determining if you are a major or minor source of HAPs, how is the use of ethylene glycol for de-icing airplanes factor into an airport's potential to emit determination/calculations?  
A: Ethylene glycol emissions would be included when calculating major source status. The General Provisions defines a stationary source as any building, structure, facility, or installation, which emits or may emit any air pollutant. The deicing operation is performed on the facility and would be included in the potential to emit determination/calculation.

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6. Q: If actual HAP emissions are below 50% of the threshold, but potentials exceed the threshold, a Asynthetic minor@ or Asmall source@ permit is applicable (not Title V). Does this mean a NESHAP (aerospace) applies or not?
- A: If you have a federally enforceable limit on your potential to emit (PTE) in a State permit, and you have limited your PTE to below 10 tons per year for a single HAP and 25 tons per year for a combination of HAPs, you are not subject to the Aerospace NESHAP.

Regarding the question about actual HAP emissions below 50% of the threshold, you are referring to EPA's transition policy. This policy was originally announced on January 25, 1995. This transition policy alleviated concerns that some sources may face gaps in the ability to acquire federally enforceable PTE limits because of delays in State adoption or EPA approval of programs or in their implementation. On July 10, 1998, EPA announced an extension to this policy until December 31, 1999. Due to the complexity of this issue and options that States have available, you should consult memorandums on this policy posted at <http://www.epa.gov/ttn/oarpg/t5pgm.html>.

7. Q: If the emissions from my aerospace activities alone do not constitute a major source, but the total emissions from my facility cause me to be a major source, does the Aerospace NESHAP apply?
- A: If the facility as a whole qualifies as a major source, then the Aerospace NESHAP requirements apply to the aerospace related activities as defined in 63.741.
8. Q: Consider an aerospace facility at which the major emitting activity is hand-wipe cleaning. How would potential to emit (PTE) for this activity be determined in making an applicability determination? In this case, past higher cleaner usage (and higher production rates) are not likely to be repeated in the future.
- A: This PTE determination involves making a reasonable worst-case judgment as to how much wipe cleaning could occur per unit of production, and in addition a worst-case judgment as to the physical capacity to produce. If there is a large amount of uncertainty in making these estimates, it may be prudent for the facility owner to obtain enforceable limits on the amount of hand-wipe cleaning solvent that may be used. When it is unclear whether a source will be in the major category due to PTE, the facility should always contact the authorized State or local agency for an applicability determination.
9. Q: If a facility is subject to the halogenated solvent NESHAP and builds engine parts for military, commercial and private aircraft B Is the facility also subject to the Aerospace NESHAP?
- A: Your facility would be covered if you are a major source (halogenated solvents also affect area sources) and you build, rework or maintain covered aircraft parts.

### New vs Existing

10. Q: If an existing affected source is moved, or relocated, within the facility, does this trigger any requirements for "new" sources?

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A: No, simply moving or relocating an existing source within the facility without reconstruction as defined in the General Provisions 63.2 does not trigger new source requirements.

### Applicability

11. Q: Are aerospace maintenance facilities covered under the aerospace NESHAP?  
A: Yes, the NESHAP applies to any major source facility that builds or reworks (including repairing and maintaining) any type of aerospace vehicle or components.
12. Q: How does a facility designate which activities/processes are exempt?  
A: The facility should determine which activities/processes it believes are exempt, and it is recommended that the facility be prepared to document how they reached those conclusions. This might include records of materials used or other documentation such as why the coating qualifies as a specialty coating, etc. Records of materials used for some exempt activities are required to be kept, and are subject to review by the inspector.
13. Q: What is the definition of Parts and assemblies not critical to the vehicle's structural integrity or flight performance in 63.741(f)?  
A: Things like tray tables, seats, luggage stowbins, doorway liners (decorative interior panels) and flight deck liners would not be critical to flight performance.
14. Q: Is landing gear exempt under Parts and assemblies not critical to the vehicle's structural integrity or flight performance? What about aircraft engines?  
A: No, such components are considered critical and would therefore not be exempted.
15. Q: 63.741(f) states that the requirements of this rule do not apply to parts/assemblies not critical to the vehicle's structural integrity or flight performance. In light of this, are armament (weapons) systems on the aircraft exempt?  
A: This question was raised previously in the July 1995 background information document for the Aerospace NESHAP. The EPA considers weapons systems that attach to, or install in, any aerospace vehicle designed to operate within the earth's atmosphere to be aerospace components and thus subject to the requirements of the final rule. Of course, the low coating usage, specialty coating, and other exemptions provided in the rule will apply to these systems in the same way they apply to aerospace vehicles and components generally.
16. Q: Does the rule apply to the coating of missiles (weapons) canisters that are used to fire missiles, missile launchers, vehicle mounted missiles, tanks, etc?  
A: The rule would not cover equipment used to launch missiles from non-aerospace sources such as tanks, ships, ground missile launchers, etc. which are not systems attached to or installed on an aerospace vehicle.
17. Q: Do inter continental ballistic missiles (ICBM) that are designed to leave the earth atmosphere and then return (so it is only temporary) qualify as a space vehicle?  
A: Yes, these missiles and their thruster tanks would be covered as space vehicles. These missiles

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go beyond the earth's atmosphere (doesn't matter how long it stays there). Although space vehicles are not subject to many parts of the NESHAP, they are covered under 63.746, depainting.

18. Q: Section 63.741(f) states that the rule does not regulate ... electronic parts and assemblies (except cleaning and top coating of completed assemblies), etc. Does this mean that the assembly must be completed prior to top coating in order to be covered or does this mean that the process of top coating the product shell is covered, whether it is assembled or not?  
A: The assembly must be completed prior to top coating to be covered.
19. Q: Are antennas exempt?  
A: Antennas that are not part of the structural integrity of the aircraft are exempt. Although antennas do assist during flight operations, they would not be considered as affecting the flight performance of the vehicle.
20. Q: Since R&D labs are not covered (63.741(f)), how does an inspector determine which activities are R&D?  
A: Section 63.742 of the NESHAP defines Research and Development as an operation whose primary purpose is for research and development of new processes and products, that is conducted under the close supervision of technically trained personnel, and is not involved in the manufacture of final or intermediate products for commercial purposes, except in a de minimis manner. The facility should be able to document that the activities conducted fit the above definition. Section 112(c)(7) of the Clean Air Act requires the EPA to establish a separate category covering research or laboratory facilities, as necessary to assure the equitable treatment of such facilities. The EPA is now initiating the process of defining that category.
21. Q: A facility manufactures components, known as wingskins, that are used as the outer shell of an airplane wing. The components undergo machining and mechanical processing that involves cutting the aluminum plates into the required shapes, machining the wingskins to the required thickness, deburring, and cleaning. The wingskin then undergoes final trimming, forming, and coating by other contractors before it is used in the final assembly of an airplane wing. Are these preliminary wingskin manufacturing operations subject to the Aerospace NESHAP requirements?  
A: The Aerospace NESHAP applies to major source facilities that are engaged, either in part or in whole, in the manufacture or rework of commercial, civil, or military aerospace vehicles or components. An aerospace vehicle or component is defined as any fabricated part, processed part, assembly of parts, or completed unit, with the exception of electronic components, of any aircraft including but not limited to airplanes, helicopters, missiles, rockets, and space vehicles. Wingskins, while not a completed aerospace component, are a fabricated or processed part of an aircraft wing. Review of the rule and the background documents indicate that the intent of the rule is to cover all basic operations that are involved in the manufacturing of an aerospace vehicle or component, including those conducted by subcontractors as well as by the original manufacturer. This includes subcontractors that merely offer a service rather than a part or component (e.g., subcontractors who perform chemical milling operations on provided substrates). The wingskin manufacturer does not produce the final product (a completed **wing**),

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but does conduct the initial operations necessary for the production of the wing. Based on these considerations, the determination was made that wingskin manufacturing operations (and similar operations that perform manufacturing steps toward producing an aerospace vehicle or component) are subject to the applicable requirements of the NESHAP (subject to major source determination and consideration of allowable exemptions, etc.).

22. Q: Is the production of components of a nuclear weapon at a Department of Energy facility subject to Subpart GG?
- A: As discussed in the previous answer, the intent of Subpart GG is to regulate emissions from facilities that are engaged, either in part or in whole, in the manufacture or rework of commercial, civil, or military aerospace vehicles or components, and that are major sources as defined in 40 CFR 63.2. Therefore, while the regulation applies to the production of missiles or missile components used in nuclear weapon delivery systems, it is not applicable to the production of the nuclear weapons or components that are carried on missiles produced at other facilities.

### **Compliance Options**

23. Q: Throughout the Aerospace rule, several options for compliance are given. Can the source use more than one compliance option at a single facility?
- A: More than one compliance option may be used by a single facility. However, any alternative compliance procedures must be approved and the facility should identify which compliance option or options are to be used to comply with the rule in the Title V operating permit.

### **Operational Areas**

24. Q: How is the operational area defined?
- A: The term is not defined. Best judgment would indicate that sources have the flexibility to define their operational areas in a way that makes sense with regard to recordkeeping and the most efficient way of tracking volume usages of cleaner, paint, etc. The rule does, however, specify that each spray gun cleaning operation and each inorganic spray booth or hangar constitutes an affected source. In these two instances, you will need to track each source separately.
25. Q: Monthly records must be kept for certain cleaners and coatings used by each area of operation (i.e. each shop or hangar). The shops or hangars typically order chemicals from central stock for use as needed. If a shop or hangar orders, for example, 5 gallons of a cleaner that is then consumed over several months, must we track the individual container over several months until it is fully consumed or can we track the 5-gallon container as consumed in the month it is ordered from stock?
- A: You can do either, just make sure that you decide which way you are going to track the material and be consistent in your usage of that method.
26. Q: In order to ease record keeping burdens associated with part 63.752(iv) - quantity of cleaning solvent used each month at each "operation", can a facility define its entire facility as one

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operation - "aircraft manufacturing".

- A:** It depends on which cleaning operation you are talking about. For wipe cleaning and flush cleaning, the rule defines the affected source as the total of all sources. In this case you could define the operational area as you wished. Under gun cleaning however, each gun cleaner is a separate affected source so you would have to identify the locations separately.

### Specialty Coating Exemption

27. **Q:** If the manufacturer of coating defines the product as a speciality coating, is this determination acceptable for classification (e.g. manufacture will be providing the definition of speciality coating and the listing in the appendix).
- A:** EPA would consider this sufficient documentation as long as the manufacturer identifies that the product meets the definition of the speciality coating being purchased. You may want to speak with your State regulators to determine if this would be sufficient information for their purposes (inspection).
28. **Q:** Does the specialty coating definition apply to touch-up after a vehicle is in operation?
- A:** Touch up and repair coating is identified in appendix A of the NESHAP as a specialty coating when it is intended for touch-up operations where minor coating imperfections are corrected after the main coating operation. An example of this would be a newly manufactured aircraft that requires a scratch or nick be fixed prior to the sale of the aircraft. Most touch-up operations that occur at rework facilities (including maintenance and repair facilities) would fall under ATouch up and repair operations@ since these applications would most probably involve the incidental application of paint and would therefore be subject to 63.745. If your Touch up operation uses organic HAP, you would be exempt from the application technique requirements in 63.745(f)(3). If your operation uses inorganic HAP, you would be exempt from the requirement to install controls 63.745(g)(4).
29. **Q:** For a paint booth which applies 100% specialty coatings (i.e. adhesive bond), is the entire booth exempt from NESHAP? In other words, do the requirements for gun cleaning, inorganic HAP, application equipment, etc. apply?
- A:** The source would not be subject to the portions of the aerospace NESHAP that applies to the specialty coating (e.g. application, removal and cleaning). However, the source is still subject to any requirements (e.g. wipe cleaning, flush cleaning, depainting, etc.) that do not apply to specialty coatings.
30. **Q:** Can a facility include specialty coatings in the VOC/organic HAP content monthly average?
- A:** No, exempt coatings are not included in any averaging calculation.

### Low volume usage exemption

31. **Q:** Under 63.741(g), the rule provides for a 50/200 gallon exemption for low volume use coatings. Does the 200-gallon cumulative limit apply to all low volume topcoats, primers, and maskants?

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Or does the 200-gallon limit apply to each coating category (i.e., 200 gal for topcoats, 200 gal for primers, and 200 gal for maskants)? If a facility uses more than the 200-gallon limit for nonexempt low volume coatings as allowed under '63.741(g), can they still exempt 200 gallons? For example, if a facility uses 400 gallons (8 formulations, 50 gallons each), can four of the formulations be exempt?

- A: Under 63.741(g), the low volume coating limit applies to all topcoats, primers, and maskants for which the annual total of each separate formulation used at the facility does not exceed 50 gallons and the combined annual total of all such primers, topcoats, and maskants used does not exceed 200 gallons. The 200-gallon low volume exemption is a *cumulative* total. You may take the 50/200 gallon exemption even if your facility uses more than the exemption limit. Any non-exempt coatings used beyond the 50/200 limit would need to comply with the NESHAP.
32. Q: If I use 75 gallons of a particular formulation but 25 gallons per year is exempted under another provision of the rule, can I exclude the 25 gal from my formulation total and exempt the remaining 50 gallons under the low-usage exemption?
- A: Yes. You should not include primers and topcoats exempt under 63.2(f) and 63.745(f)(3) and (g)(4) in the low volume usage exemption calculation.
33. Q: Does “formulation” mean the use of the product or the chemical formulation? Different manufacturers develop coatings for the same purpose which may have minor differences in formulation which they attribute to superior quality, performance, etc. It might be helpful to know how different they have to be in order to be considered separate formulations. In some cases, a slight difference may be enough for one coating to pass a QA/QC test while another (developed for same purpose) doesn't pass. This is particularly true at rework facilities, where parts are no longer in pristine condition. Also, a given Mil-Spec may contain several approved coatings under the specs. They traditionally include compliant and non-compliant (per NESHAP) coatings, as well as several with very different formulations.
- A: Formulation would be based on the manufacturer data and not Mil-Specs. A Mil-Spec only says which coatings have been determined to meet a certain criteria.

### General Cleaning Provisions

34. Q: 63.752(b)(4) requires recordkeeping of non-compliant solvent usage for the exempt operations in 63.744(e). However, 63.741(f) indicates that subpart GG does not apply to assemblies not critical to the vehicle's structural integrity or flight performance. Some of the 12 exempt operations include activities specifically exempted under 63.741(f) such as 63.744(e)(1), (2), (8). Is recordkeeping required for these exempt operations?
- A: If your facility performs operations that are exempt in 63.744 and which are not critical to the vehicle's structural integrity and flight performance, you may claim the critical exemption.
35. Q: Table 1 of section 63.744, gives the composition requirements for approved cleaning solvents. The definition for “hydrocarbon-based” approved cleaning solvents is as follows: ACleaners that are composed of a mixture of photochemically reactive hydrocarbons and oxygenated hydrocarbons and have a maximum vapor pressure of 7mm Hg at 20°C (3.75 in. H<sub>2</sub>O at 68°F).

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These cleaners also contain no HAP or depleting compounds. We've come across some cleaners in the Air Force which meet this "hydrocarbon-based" definition with the exception that they do not contain any oxygenated hydrocarbons. Would these cleaners still be considered "approved cleaning solvents".

- A: Yes, EPA had intended the "and" in "photochemically reactive hydrocarbons and oxygenated hydrocarbons" to mean "and/or". EPA made this change in the September 1, 1998 amendments.
36. Q: How is solvent laden defined? Is solvent tainted the same as solvent laden? What if I have a pre-saturated solvent wipes but due to the low saturation of the wipes, the wipes dry out by the time their use is completed. Must these wipes be placed in a bag or container once their use is completed even though the wipes no longer contain solvents
- A: Yes, your pre-saturated solvent wipes should be placed in a bag or container. Solvent laden is not defined. This issue was addressed in the BID for Promulgated Standards, July 1995, page 5-1. The commenter requested a definition or clarification of "solvent-laden." The EPA responded with the following:

If "solvent-laden" were defined as containing solvent, then commenters might ask for clarification on concentration, vapor pressure, wetness, etc. The EPA chooses not to include a clarification or definition of the term solvent-laden. The term reflects the EPA's intent that cloth, paper, or other materials that contain solvent and are not currently being used in a cleaning operation should be stored in a closed container.

37. Q: What does "still in use" mean for wipe cleaning?
- A: The term "still in use" is not found in the rule. This question may refer to the housekeeping ensures (63.744(a) in the promulgated rule) which required placing solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed containers immediately after use. The term immediately was considered vague and has been removed in the amended version of the rule which now reads "upon completing their use." The term is subject to best professional judgement as to when the use of the applicator is completed.
38. Q: What is the definition of "closed container" in the cleaning provisions?
- A: See separate Q&A developed 3/01.
39. Q: What are acceptable solvent rag handling practices as identified in 63.744(a)?
- A: The State or local permitting authority should develop and implement their own common sense interpretations on these work practices.
40. Q: What are acceptable solvent disposal procedures?
- A: It would be best to contact your State and local agencies for the best disposal methods. Solvents are often recyclable and there are companies which offer this service. Disposal is not addressed under the Aerospace NESHAP. If the solvent is a hazardous waste then it should be handled and disposed of as such. Disposal requirements may also be dependent on other Federal, State, or local requirements.

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41. Q: How do you determine compliance with the requirement to minimize spills during handling and transfer?  
A: These requirements are similar to general duty clauses found in other regulations and require a common sense approach. Good work practices would include such things as a secondary transfer bucket; training; spill-resistant containers, the use of funnels when transferring liquids from one container to another, etc. The rule did not address specific handling procedures to avoid conflict with other regulations.
42. Q: Do cleaning operations require startup, shutdown, and maintenance plans?  
A: No, it was not the intent of the NESHAP to require a startup, shutdown and malfunction plan (SSMP) for cleaning. The General Provisions is currently being modified to clarify that SSMPs are effective only where excess emissions occur. Owners and Operators following the work practice standards for wipe cleaning in the NESHAP should not have excess emissions.
43. Q: 64.753(b) defines reporting requirements associated with cleaning operations. If a facility submits a semi-annual report stating compliance, does this imply compliance 100% of the time with the solvent cleaning requirements associated with storing solvent-laden cloth in closed containers and keeping flush cleaning containers closed at all times?  
A: Yes. You should never knowingly document compliance if you have knowledge that you are not in compliance.

### **Hand Wipe Cleaning Operations**

44. Q: Do the hand-wipe cleaning requirements apply to all activities (e.g., desk, window, toilet cleaning) or just to aerospace activities?  
A: The rule has been clarified to indicate that the applicability of the final rule is limited only to the manufacture or rework of aerospace vehicles or components. Other nonaerospace activities at affected facilities are not subject to the rule.
45. Q: In 63.741(c), it states that Aall hand-wipe cleaning operations@ constitute an affected source. Therefore, if an Air Force base has 10 different operations that perform hand-wipe cleaning of aerospace parts, do all 10 operations combined constitute one affected source? If they do, then would the future addition of another hand-wipe cleaning operation on base simply be a modification to an existing affected source (i.e., does it mean the additional operation would not be considered a new source)?  
A: If the facility has conducted wipe-cleaning operations prior to June 6, 1994 any additional wipe-cleaning operations would be considered an existing source. Under 63.753(b)(1)(ii), the facility would be required to report any new cleaning solvent used but would not have to specifically identify the added source separately.
46. Q: A facility that mostly works on aircraft also does some work on space shuttle components. Must the cleaning solvents used to handwipe the space shuttle parts be kept in closed containers during hand-wiping or is this operation exempt from the housekeeping requirements?  
A: Since work on space shuttles are only applicable to the depainting section of the rule, the

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- cleaning solvents you use for this specific operation would not need to be tracked.
47. Q: How will cleaning solvent vapor pressure be determined? What evidence will the source owner have to supply to the inspector?
- A: Under 63.750(b), Test Methods and Procedures, Vapor Pressure Determination, the text indicates the necessary procedures for calculating the solvent vapor pressure. The source owner should have a record of what information was used to calculate the vapor pressure, be it material safety data sheets, engineering reference texts, or other methods. Recordkeeping (63.752(b)(3)) requires data and calculations to be kept.
48. Q: Under hand-wipe cleaning operations, if we have a multiple component product, do we need to use the vapor pressure calculations in 63.750?
- A: If the manufacturer of the multiple component product does not provide a vapor pressure for the product, you must use the vapor pressure calculations. The manufacturer should determine the VP using methods in 63.750(b)(2). If the manufacturer does not indicate the composite VP in accordance with 63.750(b)(2), you must then calculate it.
49. Q: If the source blends solvents in-house to meet the vapor pressure limit, how should the source demonstrate that the blending procedures are consistent and accurate to ensure the desired vapor pressure is met? Does the mixing methodology need some sort of certification or calibrations?
- A: The NESHAP only requires that the composite vapor pressure of a blended hand-wipe solvent be determined by quantifying the amount of each organic compound in the blend using manufacturer=s supplied data as described in 63.750(b)(2) or by testing using ASTM E 260-91. Appropriate records should be maintained by the source that show how the composite vapor pressure was determined. The NESHAP does not require any type of certification for how solvents are blended. Enforcement authorities can, at their discretion, test the blended solvents using ASTM E 260-91.
50. Q: The installation uses a number of different solvent for hand wipe cleaning, some of which have high vapor pressures. We would like to generate a composite VOC for shop based on all the solvents used. For example: shop A uses MEK (VP = 83 mm Hg & s.g. = 0.81 ) and denatured alcohol (VP = 25 mm Hg & s.g. = 0.793) at a rate of 3 gal/yr (20.3 lb/yr) and 60 gal/yr (397 lb/yr) generating a composite vapor pressure of 27.8 mm Hg. This would be less than the composite vapor pressure in section 63.743(b)(2). Is this allowed under the rule?
- A: There are no provisions in the final rule that allow averaging between hand wipe cleaning solvents. Therefore, your facility would be in violation of the rule unless each hand wipe cleaning solvent met the one of the options in 63.744.
51. Q: In section 63.744(b)(3), it specifies a 60% reduction in hand wipe solvents. Is reduction just of solvents over the 45 mm Hg (24.1 in H<sub>2</sub>O) limit, or does include those solvents that meet 63.743(b)(2) and/or 63.743(b)(1)?
- A: The 60% reduction should include all solvents.
52. Q: What latitude will the inspector have in determining the adequacy of monitoring and

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- recordkeeping for hand-wipe cleaning?
- A: Recordkeeping requirements for cleaning operations are detailed in 63.752(b). There are no monitoring requirements for hand-wipe cleaning. The rule does not detail the responsibilities of inspectors; they will need to use their best professional judgment in determining if a facility has kept adequate records of the cleaners in use. Records are adequate if they contain all of the information required in the relevant portion(s) of the rule.
53. Q: Monthly usage records are required for 63.753(b)(3). Solvent issued in one month may actually be “used” in the following calendar month. Does this recordkeeping system comply with the requirement?
- A: Yes. You should decide if you are going to track materials as they come in or when they are actually used. You should be consistent in your decision and recordkeeping approach..
54. Q: In 63.752(b), if you are using Table 1 compliant solvents, you are allowed to use purchase records to document annual usage. However, if you are using the 45 mmHg compliance option, it says that you should document usage at each source. Can purchase records be used to document usage@?
- A: Yes, you may use purchase records as long as you are able to determine what amount was purchased for each source.

### Flush Cleaning Operations

55. Q: What compliance options are there involving flush cleaning for spray guns? A: The NESHAP provides four options for cleaning spray guns (63.744(c)): enclosed system, nonatomized cleaning, disassembled gun cleaning, and atomized cleaning. Equivalent methods are also acceptable upon approval by the Administrator. A separate provision (63.744(d)) addresses flush cleaning of aerospace parts or assemblies, as well as components of a coating unit (except for spray guns). Options for cleaning spray guns are discussed in 63.744(c).
56. Q: The exemptions in 63.744(e) pertain to hand-wipe cleaning only. Do the flush cleaning requirements apply to the operations exempted from wipe cleaning? In other words, is the flush cleaning of oxygen breathing systems, hydraulic systems, fuel and engine systems, etc. subject to this rule if nonexempt solvents are used?
- A: Yes. Flush cleaning operations would be subject to 63.744(d). Wipe cleaning exemptions do not apply to flush cleaning.
57. Q: True or False: The flush cleaning definition in 63.744(d) does not require the actual cleaning to be performed in an enclosed container. It only requires that the used cleaning solvent is emptied/directed into a container/collection system that is kept closed when not in use.
- A: True.
58. Q: Often during flush cleaning, an operator must use a rag to wipe off drip areas around the area being flushed, or to keep the flushing solvent from migrating to another area. Does the use of the rag constitute “hand action” (from the definition of flush cleaning, last sentence) and

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therefore invalidate this as a flush cleaning operation?

- A: It appears that you are not using the rag as an intended wipe cleaning activity and therefore it would not be considered removal of contaminants using hand action. You are using the rag for a secondary purpose and therefore your operation would still be flush cleaning.

### **Spray Gun Cleaning Operations**

59. Q: If water (or another non-HAP, non-VOC material) is used for spray gun cleaning, is it regulated by the Aerospace NESHAP?

A: No, 63.741(f) specifically states that the requirements of the Aerospace NESHAP do not apply to cleaning solvents containing HAP and VOC at concentrations <0.1% for carcinogens or <1% for noncarcinogens.

60. Q: When defining sources, is it acceptable to report all types of spray gun cleaning at a given coating source as one spray gun cleaning source? Example: If a coating operation used disassembled, non-atomized and one or more enclosed spray gun cleaners depending on worker preference, can this be considered one spray gun cleaning source?

A: Yes. Different types of spray gun cleaning operations (e.g. enclosed, non-atomized) are simply compliance options available and do not constitute a separate affected source. For Title V and inspection purposes, however, you may be required by your State and local permitting authority to identify which compliance options you will use for each affected source (e.g. each separate area where gun cleaning operations are being performed).

61. Q: If we have a gun cleaner that has a lid, but, we lift the lid to perform atomized cleaning (and then close the lid), is this in compliance? What is an enclosed system?

A: No. In accordance with 63.744(c)(4), you must redirect the resulting atomized spray into a waste container that is fitted with a device designed to capture the atomized cleaning solvent.

62. Q: 63.444(c) defines gun cleaning requirements. Do the requirements apply to the gun hoses and paint pots also or just the actual gun?

A: Gun cleaning would include only your gun. Other parts (hoses) would fall under the flush cleaning section of the rule.

63. Q: Part 63.444(c)(4) describes an acceptable atomized cleaning technique. If the atomized discharge is sprayed into a 55 gallon drum with a small breathing vent opposite the opening where the solvent is sprayed, does this procedure meet requirements?

A: No, the drum has not been fitted with a device to capture the atomized cleaning solvent emissions.

### **RCRA Waste**

64. Q: Are RCRA wastes covered under the rule?

A: The handling and transfer of waste subject to RCRA are not covered under the NESHAP.

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Please consult 40 CFR 260-268 for specific guidance on RCRA applicability. For all other wastes, section 63.748 requires owners and operators who are subject to the NESHAP and who produce waste that contain HAP or VOC to conduct the handling and transfer of the waste to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills.

65. Q: When does a rag used for wipe cleaning become a RCRA waste?  
A: The answer to this question is not as straightforward as it may appear. First, it needs to be determined whether the wiper and solvent is a hazardous waste, which will depend on several things: (1) whether the solvent was applied first to the item to be cleaned or to the wiper first; (2) the type of solvent; (3) whether the wiper also exhibits the characteristics of a hazardous waste; and (4) when and if the wiper is to be laundered or simply discarded. Several articles on this topic appear on the EPA Homepage in the RCRA Permit Policy Compendium. You may also want to consult 40 CFR Sections 261.2 and 261.3 for more information on when something becomes a solid or hazardous waste. In addition, you may want to discuss this with your State RCRA contact.

### **Primer and Topcoat Application**

66. Q: What is a primer? What is a topcoat? Which coatings are actually regulated and how should they be defined in a Title V permit?  
A: Coating: a material that is applied to the surface of an aerospace vehicle or component to form a decorative or functional solid film, or the solid film itself. Primer: the first layer and any subsequent layers of identically formulated coating applied to the surface of an aerospace vehicle or component. Primers are typically used for corrosion prevention, protection from the environment, functional fluid resistance, and/or adhesion of subsequent coatings. Topcoat: a coating that is applied over a primer (or may be a self-priming topcoat) on an aerospace vehicle or component for appearance, identification, camouflage, or protection. Under the Aerospace NESHAP, the HAP and VOC emissions from the application of primers and topcoats are regulated for major facilities. Specialty coatings (as defined in Appendix A of the NESHAP) are exempt from the NESHAP; however, the aerospace control techniques guideline document (CTG) includes guidance for regulating specialty coatings which may be adopted by the States. The definitions used in the rule have been agreed upon during industry/EPA Round Table discussions, and may be used in a Title V permit.
67. Q: How can a primer and topcoat easily be determined during an inspection?  
A: The source should identify the products he is using in sufficient detail so that the permitting authority can identify if the product meets compliance with the NESHAP. Under 63.752, the source is required to document the name and VOC content as received and as applied for each primer and topcoat used at the facility. This documentation should assist the inspector. In addition, supporting MSDSs or product data sheets should be on-hand which will also provide information on the type of coating and its intended use. If the inspector is not confident that the documentation provided by the source is accurate, they may wish to

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contact the manufacturer for additional information or obtain a sample of the material for analysis.

68. Q: What documentation is necessary to substantiate a company's classification of a coating as a primer, topcoat, or specialty coating?  
A: EPA would consider a list of coatings used, its coating identification and the manufacturer's MSDS or documentation from the manufacturer that the product meets the definition of the specialty coating sufficient documentation. Your State agency, however, may require more stringent documentation for inspection purposes.
69. Q: Under what circumstances is a painting operation considered "new"?  
A: A painting operation is considered new if the source is a major source and *constructs* a primer or topcoat operation where there was not previously one after June 6, 1994, or if an owner or operator *reconstructs* such that the cost of the replaced components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source. Adding a new organic HAP spray line does not constitute a new painting operation because the affected operation is the total of all the topcoat or primer applications at the facility. However, an added spray booth or hangar at a facility with existing primer or topcoat operations that will be used for applying primer or topcoat containing inorganic HAP would be considered a new source for purposes of compliance with inorganic HAP requirements only.
70. Q: Is there a sq ft or other limit to be a touch-up coating operation?  
A: No, EPA originally proposed a 4' x 4' area to be considered touch-up but comments received during the proposal made it clear that touch-up can vary plane by plane. You should contact your State or local permitting authority if a determination is needed as to what would be considered Atouch-up@.
71. Q: Do touch-up materials have to comply with VOC requirements?  
A: Touch-up operations covered under 63.745 are exempt from the application technique requirements and control device requirements only (e.g. use of HVLP). All other requirements apply including VOC/HAP limits if you choose that compliance option.
72. Q: When determining compliance status how many significant figures are attached to the lb/gal limits? For example, if the primer monthly average VOC content for a facility is 2.94 lb/gal, it would round to 2.9 lb/gal with two significant figures. Does this meet requirements?  
A: When rounding, you should follow standard mathematical rounding techniques. In this case, the NESHAP has a *no more than* 2.9/3.5 lb gal limit). This is one significant digit passed the decimal mark. You would round to the same significant digits in your reporting. In your case, 2.94 rounds to 2.9 (you'd round up if you had 2.95) using standard rounding techniques. You would be in compliance.

### Averaging Coatings

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73. Q: 63.745(e)(2) states that a monthly volume-weighted average can be used for primers and topcoats to demonstrate compliance with the applicable organic HAP and VOC content limits (note: we realize that primers and topcoats may not be added together). We have the following two questions pertaining to this:

1) Can the averaging be conducted within each individual operation or does the averaging have to be done for all operations combined? Note: most Air Force bases have several individual shops that perform coating operations. These shops are usually independent of one another and located in different parts of the base. Therefore, performing the averaging base-wide (i.e., for all operations combined) would be extremely difficult.

2) If averaging is conducted and results show that the VOC and/or the organic HAP content is above the applicable limit, do all the coatings have to be controlled or just those that are above the limits?

A: 63.745(e)(2) specifies that the “combination of primers and topcoats comply with the specified content limits”. The term “combination” is referring to the averaged primers or topcoats, and not the facility. The facility has the option to average any primer and topcoat, at any location(s) where aerospace priming and coating operations occur, as long as you do not average primers and topcoats together. Only those applications above the limits would require controls, since the remaining primers and topcoats are already in compliance with the rule.

74. Q: Can you average waterborne coatings?

A: Yes, waterborne coatings may be averaged under 63.743(d) within coating categories, e.g primer to primer, topcoat to topcoat, etc.

### **Coating VOC/HAP Content**

75. Q: How will the VOC content of coatings be determined by inspectors? What evidence is adequate from the source owner’s perspective?

A: Recordkeeping requirements are specified in 63.752 (c) and (d) for primer and topcoat application operations, and in 63.752(f) for maskant operations.

76. Q: Under 63.752(c), it lists several recordkeeping requirements applicable to topcoats and primers as-applied. However, paragraph (c)(1) requires name and VOC content for both as-received and as-applied coatings. Why is as-received required under paragraph (c)(1) and not other items under 63.752(c)? Also, does paragraph (c)(1) apply if control devices are used?

A: 63.752(c) indicates that records should be maintained as appropriate. 63.752(c)(1) would be appropriate information for any operation that used primers and topcoats and therefore would be information that everyone would have to maintain. Since everyone should maintain records for each primer and topcoat on the VOC content as-received, this is only included once. The EPA is aware that thinner is added to many primers and topcoats for a variety of reasons. To ensure that thinner are adequately accounted for, the “as-received” and “as-applied” requirements were added to the rule. If your facility uses 63.745(c) to meet

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compliance, you will be responsible for documenting all information found in 63.752(c)(1) through (c)(6).

77. Q: How is VOC content determined, especially for 2-part or 3-part coating mixtures?  
A: The manufacturer should provide the VOC content of the coating as mixed to their formulation. Only if a source mixes their coatings differently from the manufacturer's mix ratio would they have to calculate or otherwise demonstrate the associated VOC or HAP content to show compliance. The source should follow procedures in 63.750 for determining HAP/VOC based on the compliance option they choose.
78. Q: Does a source have to keep the organic HAP and VOC content level determination values provided by a coating vendor if the manufacturer claims proprietary information? If the source keeps records on the vendor supplied organic HAP content, without the supporting data calculations or analysis, does this meet the recordkeeping requirements in 63.752(c)?  
A: Yes and No. The source must keep records on the mass of organic HAP (H<sub>i</sub>) and VOC (G<sub>i</sub>) emitted as applied for each coating formulation. The source must also keep all data, calculations and test results used to determine those values. Vendors and/or manufacturers cannot claim HAP or VOC content data as proprietary. The source as the customer should have a significant amount of leverage in obtaining the needed information for the R & R requirements. Employees Right to Know provides another reason for the information to be provided by the supplier of the material.
79. Q: We use paint kits consisting of individual one-gallon containers of each paint component that are compliant when mixed. The individual one-gallon containers are set up on a paint bar so that mechanics can mix small batches from the one-gallon containers. Are we required to keep records of each small batch to show that it is properly mixed? Is it sufficient to track the use of each individual larger kit instead of each separate small batch?  
A: You may track the larger kit if what you apply is the same as what has been supplied by the manufacturer. If, however, you add thinner or dilutant to the smaller batches, you would be required to document the Aas-applied@ usage.

### **Coating Application Techniques**

80. Q: Which primer/topcoat activities are exempted from high transfer efficiency requirements (i.e., when are HVLP spray guns not required)?  
A: Acceptable application equipment is listed in 63.745(f)(1), which includes high volume low pressure (HVLP) spray equipment. Exempted activities are listed under (f)(3) as follows:  
(a) Situations that require the use of an airbrush or an extension on the spray gun to reach a limited access space;  
(b) The application of coatings that contain fillers that adversely affect atomization with HVLP spray guns and that cannot be applied by any of the application methods specified in (f)(1);  
(c) The application of coatings that normally have a dried film thickness of less than 0.0005 in. (0.0013 cm) and that the permitting agency has determined cannot be applied by any of

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the application methods specified in 63.745(f)(1);

(d) The use of airbrush application methods for stenciling, lettering, and other identification markings;

(e) The use of hand-held spray can application methods; and

(f) Touchup and repair operations.

81. Q: Can a source demonstrate compliance with the HVLP requirement of 63.745(f)(2) simply by demonstrating that they are following the manufacturer's specification or are additional monitoring techniques like a gun tester required to demonstrate compliance with the 10 psig?
- A: Compliance can be shown simply by demonstrating that the HVLP is following the manufacturer's specification. No additional monitoring is required, however, sources may be motivated to use monitoring techniques to save material (coating) and the associated cost. The permitting agency has the discretion to require such monitoring techniques since State/local agencies may impose more stringent requirements than the NESHAP.
82. Q: How should a source interpret 63.745(f)(2) to operate coating application devices using company procedures, local specified operating procedures, an/or manufacturer=s specifications, whichever is most stringent, at all times?
- A: This requirement was added to the rule based on comments received from industry that there may be cases in which existing or new process equipment has inadequate, inaccurate, or incomplete operating instructions. In such cases, the user must develop additional instructions to ensure proper operation and compliance with safety and environmental laws. This provision was changed in the draft NESHAP to include company procedures and local specified operating procedures to prevent duplication of documentation in such cases. In most instances, sources will utilize the manufacturer's specification. If however, they develop company procedures, those procedures must be as stringent or more stringent than the manufacturer=s recommendations.

### **Coating Exemptions**

83. Q: I have a hand held gun which is similar to a aerosol can. Under the definition of aerosol can, you say non-refillable. The type of gun we use has a refillable pot but we have canisters of propellant that we must change out (these are non-refillable). Everything else is similar to the aerosol can including the spray button that you must continuously press down on. Is this a aerosol can?
- A: Yes, as long as the applicator is similar to an aerosol can in all respects except for the refillable propellant, this gun would be considered an aerosol can.
84. Q: 63.745(g) lists nine exemptions to the inorganic HAP emissions requirements for primers and topcoats. Three of these nine exemptions involve touchup of certain parts. It is our understanding that all touchup operations are exempt from the Aerospace NESHAP because touchup is considered a specialty coating. For this reason, what is the purpose of listing these three types of touchup as exemptions to the inorganic HAP requirements?
- A: Touchup and repair coating is identified in appendix A of the NESHAP as a specialty

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coating and is intended for touch-up operations where minor coating imperfections are corrected after the main coating operation. An example of this would be a newly manufactured aircraft that requires a scratch or nick to be fixed prior to the sale of the aircraft. Most touchup operations that occur at rework facilities (including maintenance and repair facilities) would fall under Atouch-up and repair operations@ since these applications would most probably involve the incidental application of paint during an out-of-sequence or out-of-cycle operation. Touchup applications meeting this definition are exempt from only 63.745(f)(1), application techniques. All other requirements, such as HAP/VOC content, are applicable to touchup painting operations.

85. Q: Filtration requirements prohibit outdoor spray painting operations involving inorganic HAPs but Aerospace equipment no longer operational, intended for public display and not easily capable of being moved are exempt from these filtration requirements. Are these inclusive conditions or exclusive conditions? Are these the only place inorganic HAPs can be applied outside a booth?

A: The requirement is inclusive, you must meet all three criteria to use this exemption. 63.745(g) has a list of operations that are exempt from the requirements to use filtration devices (e.g. touchup of trimmed edges, use of hand-held spray can application).

86. Q: The rule exempts areas where it is Anot technically feasible@ to control from the inorganic HAP requirements as along it is identified in a Title V permit. Does this also apply to permit application? Could it also be designated by the permitting authority by letter and incorporated into the permit at a later time?

A: Contact your State and local permitting authority for a determination.

### Coating Control Devices

87. Q: If you are using coatings containing inorganic HAP, do you have to use the certified filters?

A: 63.745(g) provides several options for controlling emissions of inorganic HAP. The available options vary based on whether a source is considered to be existing or new. If filters are used to comply, they must be certified to meet the applicable requirements in 63.745.

88. Q: 63.745(g)(2)(I) requires existing sources to use two-stage filters for inorganic HAP; 63.745(g)(2)(iii) Agrandfathered the same requirements to any new facility started between proposal and promulgation; 63.749(a) asks for three-stage filters for new sources. Which one should be followed?

A: If a source constructed a spray booth before June 6, 1994, that booth is considered *existing*. If a source constructed a spray booth after June 6, 1994, that booth is considered *new*. The NESHAP allows those sources that constructed a *new* spray booth between June 6, 1994 and October 29, 1996, to use the new source filter requirements or use the optional 2 stage filter or waterwash unless chromium or cadmium was used.

89. Q: If a facility becomes a major source between 9/1/95 and 9/1/98, will all spray booths at this facility become new sources and subject to the 3-stage filter system requirement for

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- inorganic HAP on 9/1/98, or only the ones constructed and reconstructed since the facility became a major source? [i.e., Are the booths older than 9/1/95, or older than the date of becoming a major source considered existing sources and utilize 2-stage filters?]
- A: The date that the facility became a major source is not a factor in determining new versus existing. The date that the equipment was installed is the key factor. As indicated above, the NESHAP considers an existing booth one that was constructed at the facility prior to June 6, 1994. All other booths are considered new.
90. Q: How will compliance be determined for spray booth filters? Will records of specific filter manufacturers be adequate?
- A: Compliance requirements for inorganic HAP emissions are detailed in 63.750(o). Dry particulate filters used to comply with 63.745(g)(2) or 63.746(b)(4) must be certified by the filter manufacturer or distributor, paint/depainting booth supplier, and/or the facility owner or operator using Method 319 in appendix A of subpart A of the NESHAP, to meet or exceed the efficiency data points found in Tables 1 and 2, or 3 and 4, of '63.745 for existing and new sources, respectively. Although you are not required to do so, you will probably want to keep a copy of the certification record.
91. Q: How will filter compliance be demonstrated?
- A: The source must be able to show that the filters being used to comply with the painting and depainting (inorganic HAP) requirements have been certified using Method 319. Documentation of that certification should be readily available to an inspector if requested. There are no reporting requirements for that certification.
92. Q: 63.751(c)(1) and (c)(2) and (d) says that the reading and recording of the pressure drop has to occur while application operations are occurring. This means an operator must be actually spray painting while the recording is taken. Why can't the recording be taken without the actual spray painting but while the booth ventilation system is operating? This avoids the recording person coordinating with each booth spray painting. This is also a contradiction with 63.745(g)(2)(iv) which does not include the limitation >while application operations are occurring=.
- A: You do not have to read and record the pressure drop while actual spray painting is occurring, however, the paint booth must be on and operating when you take the reading.
93. Q: What is acceptable monitoring for pressure drop in paint spray booths, especially in large booths with multiple filter banks?
- A: Monitoring requirements in 63.751 for dry particulate filter or waterwash systems indicate that the owner or operator must continuously monitor the pressure drop across the system, and read and record the pressure drop once per shift following the recordkeeping requirements of 63.752(d). Depending on the size of the system, multiple points may need to be monitored. Recordkeeping would be required for each of those points.
94. Q: When using a filter system with multiple pressure drop gauges, when would immediate shutdown of the coating operation be required for the following scenarios: one gauge out of range? All are out of range? When half the gauges are out of range?

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- A: If any of the gauges show an out of range reading, the coating operation must be shutdown immediately.
95. Q: When one continuous operation of painting an entire aircraft in a paint hangar overlaps 2 shifts, and the 1<sup>st</sup> shift differential pressure gauge reading is within the specified limit, but the next shift differential pressure gauge reading is outside the specified limits, would it be acceptable for the operation to continue until completion, of stopping after the 2<sup>nd</sup> gauge check failure were to cause a rejected paint job on the plane, and thus require the entire plane to be repainted?
- A: No, shutdown immediately is the requirement and has no caveats. To prevent this situation for occurring, the source may wish to make a practice of changing out filters prior to a vary large paint job or before the recommended filter replacement schedule. To minimize the effects if the operation were shut down, the source would need to have a plan for quickly rectifying a gage reading that exceeds the acceptable range so that painting can be resumed as quickly as possible.
96. Q: Does the rule require the performance or recordkeeping of the visual continuity/flow characteristic of a waterwash booth? What is required if the water wash system fails the check?
- A: There are no recordkeeping requirements associated with the visual continuity/flow characteristics of a waterwash booth. 63.745(g) requires you monitor the booth and shut down the system when the waterwash fails the visual continuity/flow characteristics check. You should follow manufacturers directors or locally prepared operating procedures for determining visual continuity/flow characteristics.
97. Q: How does a facility determine the acceptable water flow rate if (a) booth was designed in-house; (b) manufacturer is no longer in business; (c) manufacturer will not state an acceptable range?
- A: Your facility will need to test the system to determine the acceptable water flow rate. If you are unable to do this in-house, there are many testing companies which can determine the flow for you.
98. Q: What is the frequency for monitoring a non-renewable carbon wall system in a paint booth? What should be used to monitor? How often do you report this? Does anyone check the engineering analysis for accuracy?
- A: We just changed this in the latest amendment. Under 63.751(b)(1)(iii), for a nonregenerative carbon adsorber, a site-specific operating parameter value may be established as part of the design evaluation used to demonstrate initial compliance. Otherwise, the site-specific operating parameter value shall be established during the initial performance test. Another option is to establish as the site-specific operating parameter the carbon replacement time interval, as detailed in 63.751(b)(2). Under recent changes, 63.751(b)(6)(iii) and (iv) monitoring requirements are detailed. Reports are required every 6 months (63.753(c)(1)(iv), (d)(3) and (e)(3)). The permitting agency can check all the calculations for accuracy.
99. Q: To avoid the filter Startup, Shutdown and Malfunction plan, you can operate per the

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manufacturer's instruction. What documentation of the manufacturer's instructions in a facilities operation does EPA expect?

- A:** EPA would consider a copy of the instructions as sufficient. If you are developing an internal standard operating procedure, you can incorporate all the manufacturers's instructions or incorporate the instructions that provide information on the startup, maintenance, malfunction and shutdown procedures for the booth.

### Depainting

100. Q: What records are needed to demonstrate that the source is not subject to the depainting provisions?  
A: There are no recordkeeping requirements in the rule that address this issue. However, a facility should be able to substantiate why they are exempt, and this may require some recordkeeping. A facility may also need to demonstrate why they did not consider depainting certain parts of the aircraft to fall under the rule.
101. Q: How is the applicability of the depainting part of the regulation determined (i.e., is rolling 12 months or calendar year used, what is exempted in counting, etc.)?  
A: 63.746 indicates that an aerospace manufacturing facility that depaints six or fewer completed aerospace vehicles in a *calendar year* is exempt from this section of the rule. The rule does not specify any particular aerospace vehicle size associated with this exemption.
102. Q: For the depainting requirements, 63.746(a)(1) refers to "completed" aircraft. Does completed mean an aerospace vehicle that has been successfully delivered to a customer?  
A: No, completed means the relative whole, or complete aircraft vehicle as compared to subassemblies or components.
103. Q: The depainting regulation focuses on the exterior surfaces of a completed vehicle. Does that mean that if I remove a part prior to depainting that it is not covered?  
A: Correct, except for those parts identified in 63.746 including wings and stabilizers which are covered even if removed from the aircraft prior to depainting.
104. Q: Section 63.752(e)(4) of the rule (depainting) requires "...for each type of aircraft depainted at a facility, a listing of the parts, subassemblies, and assemblies normally removed from the aircraft before depainting..." Does this apply to all depainting activities or just chemical stripping?  
A: This requirement applies to chemical stripping operations only.
105. Q: If our facility operated 50 aircraft (number of aircraft on our property listing), however, we also perform Aextra@ depainting on wing stabilizers for aircraft that are not officially ours. What do I use to count the # of aircraft?  
A: Under 63.746(b)(3), you shall not, on an annual average basis, use more than 50 gallons of organic HAP stripper per military aircraft depainted for spot stripping and decal removal.

Note: While these questions and answers constitute the best available information at this time, the EPA recommends that you consult your State or local air pollution control agency for any final determinations. State and local agencies may implement provisions that are more stringent than those contained in the NESHAP.

## Aerospace NESHAP Q&As

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This means that you would count your planes (not parts). If you had 50 planes x 50 gallons per plane, you would be able to use annually 2,500 gallons of organic HAP stripper at your facility. This amount is limited to spot stripping and decal removal only. It does not give you the authority to perform non-spot stripping with any amounts you may have left over from your annual total.

106. Q: A completed aircraft has a small area where the coating has to be removed. It is technically infeasible to remove the coating using non-HAP strippers or mechanical/hand sanding. Therefore, a HAP-containing stripper is used in an amount that complies with the spot stripping exemption ( $\leq 26$  gallons per commercial aircraft or  $\leq 50$  gallons per military aircraft, annual average). Does the use of the HAP-containing stripper on this aircraft count towards the total # of aircraft repainted in a calendar year?
- A: No, it would apply to your spot stripping exemption.
107. Q: If a source uses "other" technologies to remove paint such as high pressure water, laser repainting, etc., which option in 63.746 do these types of operations fall under?
- A: The source should comply with 63.746(b)(1), the non-HAP chemical strippers and technologies section of the regulation.
108. Q: What is a RCRA waste with respect to repainting waste material?
- A: RCRA hazardous waste is defined in 40 CFR Section 261.3 and solid waste is defined in 40 CFR Section 261.2. If you are unsure whether or not your waste is hazardous you should contact the State RCRA office. Information provided on your MSDS should help you in that determination.
109. Q: Under repainting, nonchemical based equipment, you require that a dry media blasting system have their filter efficiencies tested. They are two primary types of filters in blasting systems - the baghouse and the particulate filter. Specifically, our blasting operation uses a cartridge-type filter dust collector system. The dust collector appears, on the outside, to be similar to a typical baghouse. However, instead of free-hanging bags, the filter media is contained in cylindrical cartridges, similar in construction to an automobile air filter (although these cartridges have lengths much greater than their diameter, while an auto air filter typically has a diameter greater than their length). Typically 12 - 48 cartridges are installed in a dust collector, depending on their size and air handling capacity. The cartridges are cleaned using pulse-jets, and typically have a useful life of 2 years or more. Such equipment would not be practical for use as control devices for paint booths, due to the rapid fouling of the cartridges (pulse jets would not be effective for cleaning paint overspray from the cartridges) that would result. We would like to know if these cartridge-type filters are covered under Subpart GG and must we perform a method 319 test on them?
- A: The baghouse is exempt from Method 319 testing, however, you will be required to use Method 319 type particulate filters if you have a liquid phase associated with the operation (e.g., operation includes wet paint overspray). Otherwise, your blasting operation that uses these types of cartridge-type filters can be treated as a baghouse for purposes of filter efficiency testing.

Note: While these questions and answers constitute the best available information at this time, the EPA recommends that you consult your State or local air pollution control agency for any final determinations. State and local agencies may implement provisions that are more stringent than those contained in the NESHAP.

## **Aerospace NESHAP Q&As**

(10/1/98, last updated 10/9/01)

### **Maskants**

110. Q: We have a facility applying chemical processing maskant where the booth, flashoff area, and oven are all vented to a carbon adsorber. Due to the amount of emissions from the maskant operation, we are subject to the NESHAP, although the only operations affected are hand-wipe solvent use and spray gun cleaning. The spray gun cleaning is what is giving us some concern. The guns are automatic reciprocators that are equipped with cleaning brushes so that the operator can turn off the maskant, direct solvent through the gun, and have the brushes automatically scrub the nozzle of the gun without having to shut down the operation. The atomized solvent spray is of course captured and sent to the carbon adsorber. Unfortunately, this process does not meet the NESHAP requirement in that there is no "waste container." The carbon adsorber is a highly efficient capture device that is better than what was probably envisioned for this type of cleaning. How do I comply?
- A: 63.744(c) describes four methods for spray gun cleaning and allows an owner or operator to use a method equivalent to those described in '63.744. Owners and operators should consult with the Regional Office or the State or local agency for equivalency determinations.
111. Q: I have an aerospace facility which uses the same maskant for aluminum chemical milling (type I) and titanium chemical milling (critical use). Applications are not used on the same part or subassembly. The maskant does not meet the HAP/VOC limits in 63.747(c) or 63.747(e)(1) since low VOC/HAP maskants do not work effectively in the corrosive solution used for the titanium etching (nitric acid or hydrofluoric acid). We understand that the titanium process is not regulated under this subpart, but believe that the type I process is also exempt based on the proposed definition of chemical milling maskant in 63.742. Is our maskant process exempt from 63.742 and 63.747? The proposed 63.742 states "Additionally, maskants that must be used with a combination of Type I or II etchants and any of the above types of maskants (e.g., bonding, critical use and line sealer, and seal coat) are also exempt from this subpart."
- A: Yes, in this particular instance, your maskant would be exempt since you are using a maskant for a type I and critical use applications.

### **Test Methods and Monitoring**

112. Q: Under 63.751(b)(6)(ii)(D), it requires that the carbon in the carbon adsorber system be replaced at a regular predetermined time interval. What if a source uses the operation so sporadically that they would be repeatedly replacing clean carbon? Could they instead use a usage interval?
- A: Under 63.751(b)(2), the owner or operator may establish a site-specific operating parameter to determine the carbon replacement time interval as determined by the maximum design flow rate and organic concentration in the gas stream vented to the carbon adsorption system. The carbon replacement time interval must be established either as part of the design evaluation to demonstrate initial compliance or during the initial performance test conducted according to procedures in 63.750(g)(1), (2), (3), or (4).

Note: While these questions and answers constitute the best available information at this time, the EPA recommends that you consult your State or local air pollution control agency for any final determinations. State and local agencies may implement provisions that are more stringent than those contained in the NESHAP.

## **Aerospace NESHAP Q&As**

(10/1/98, last updated 10/9/01)

113. Q: Under 63.751(b)(6)(iii)(A)(2), it states that for nonregenerative carbon adsorbers a portable monitoring device can be used in lieu of continuous emission monitors. If a portable monitoring device is used, what is the minimum duration of each monitoring test and how frequently must a test be performed?
- A: 63.751(b)(6)(iii)(A) indicates how the monitoring test should be operated. The frequency of the test is not indicated, although 63.751(b)(6)(iii)(D) indicates that the carbon must be replaced at a regular predetermined time interval as determined in 63.751(b)(2). The frequency of the test would be established by the permitting authority or at a minimum once for each carbon unit depending on replacement intervals.
114. Q: 63.750(g)(9) states that either EPA Method 18 or EPA Method 25A shall be used to determine VOC and HAP concentrations of air exhaust streams. Does this mean that just Method 25A can be used even if the coatings being applied contain HAP? Method 25A is much easier and cheaper than Method 18; therefore, if given the choice most people will choose Method 25A. Can you give an example (or examples) of a situation in which Method 18 should be used instead of Method 25A?
- A: The section cited, 63.750(g)(9), indicates to use the method that is appropriate to the conditions at the site. Method selection should be based on consideration of the diversity of organic species present and their total concentration and on consideration of the potential presence of interfering gases. The biggest difference in the methods is that Method 18 can provide 11 speciated results, while Method 25A only provides total VOC results measured as propane. If a source is looking for specific HAP or if they have exempt organic compounds that they want to subtract out of their total results, then they will need to have speciated data. If all they are looking for is total VOC, then Method 25A can provide those results in most situations.

### **Miscellaneous**

115. Q: Can a regulatory authority require that a source place specific coating definitions in their air operating permit?
- A: Under the NESHAP, the source should identify the products he is using in sufficient detail so that the permitting authority can identify the types of coatings to be regulated and those that are not to be regulated. The State/local permitting agency has the authority to implement more stringent requirements. You may wish to consult guidance on EPA's Title V permitting process to determine the level of detail required within that permitting program.

### **CTG**

116. Q: Which VOC limits in the NESHAP are CTG limits? The NESHAP contains both HAP and VOC limits, which are enforceable as a NESHAP limit?
- A: While both HAP and VOC limits are enforceable under the Aerospace NESHAP, the CTG only applies to VOC limits. The VOC limits in the NESHAP are included in the CTG. The CTG also includes VOC limits for specialty coatings.

Note: While these questions and answers constitute the best available information at this time, the EPA recommends that you consult your State or local air pollution control agency for any final determinations. State and local agencies may implement provisions that are more stringent than those contained in the NESHAP.

## **Aerospace NESHAP Q&As**

(10/1/98, last updated 10/9/01)

117. Q: What aerospace facilities will be obligated to comply with the Aerospace CTG?
- A: The CTG is guidance and effects States designated as an ozone non-attainment area. States may adopt the CTG or use it as a guide for developing State RACT regulations. States who are in non-attainment must submit RACT by March 27, 1999. Sources subject to the State RACT will have to implement the requirements by September 1, 1999. States that are in ozone compliance may still adopt the CTG or other standards that cover operations exempt from the NESHAP (e.g. specialty coatings). Please consult your State and local permitting authority for additional information.